INCH-POUND

A-A-55524/1A

31 January 2003

SUPERSEDING

A-A-55524/1

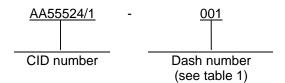
17 October 1997

COMMERCIAL ITEM DESCRIPTION

SHUNT, INSTRUMENT (EXTERNAL, 50 MILLIVOLT, 10 THROUGH 150 AMPERES [A] LIGHTWEIGHT TYPE)

The General Services Administration has authorized the use of this commercial item description (CID) for all federal agencies.

- 1. SCOPE. This CID covers the general requirements for 10 through 150 amperes (A) lightweight type, 50 millivolt (mV) external, instrument shunts. Shunts covered by this CID are intended for commercial/industrial applications.
- 2. CLASSIFICATION. This CID uses a classification system which is included in the Part Identification Number (PIN) as shown in the following example (see 6.1).

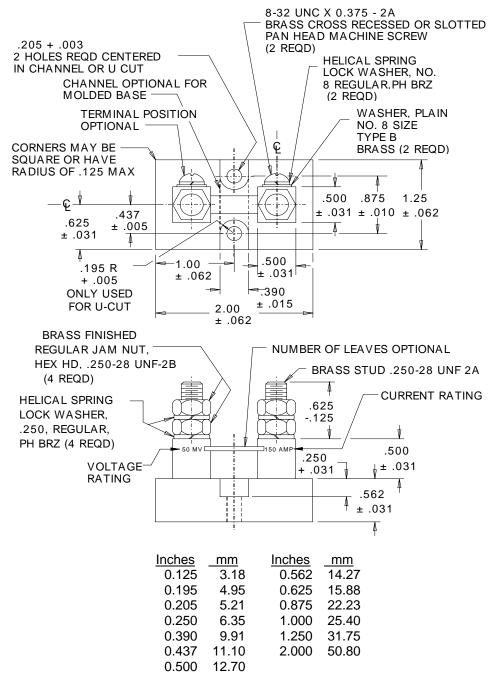


- 3. SALIENT CHARACTERISTICS.
- 3.1 <u>Interface and physical dimensions</u>. The shunt supplied to this CID shall be as specified herein. (See figure 1.)
- 3.2 Configurations and dimensions. Configurations and dimensions shall be specified in figure 1.
- 3.2.1 Mounting Hardware. Mounting hardware, screws and washers, shall be ANSI/ASME or equivalent.

Beneficial comments, recommendations, additions, deletions, clarifications, etc., and any data which may improve this document should be sent to: Defense Supply Center, Columbus, ATTN: DSCC-VAM, Post Office Box 3990, Columbus, OH 43216-5000, or telephone (614) 692-0559, or facsimile (FAX) (614) 692-6939.

AMSC N/A

FSC 6625



NOTES:

- 1. Dimensions are in inches.
- 2. Unless otherwise specified, tolerance is ±0.005 inch (0.13mm).
- 3. The US government preferred system of measurement is the metric SI system. However, since this item was originally designed using inch-pound units of measurement, in the event of conflict between the metric and inch-pound units, the inch-pound units shall take precedence.

FIGURE 1. Configuration and dimensions.

- 3.3 Ampere rating. The ampere rating shall be specified in table 1.
- 3.4 Voltage rating. The voltage rating shall be 50 mV \pm 0.3 mV.
- 3.5 Terminal block material. The terminal block material shall be brass.
- 3.6 <u>Shunt resistance blade material</u>. The resistance blade strip material shall be Manganin or an alloy having an equivalent temperature coefficient of resistance at any temperature within the working range of the shunt.
- 3.7 <u>Shunt base mounting</u>. The shunt-terminal blocks shall be mounted securely with screws of adequate size, and shall be made resistant to loosening. The heads of the screws shall be recessed in the base and properly protected with a good grade of insulating compound which shall not flow, crack, chip, pulverize, or otherwise deteriorate substantially.
- 3.8 Shunt base material. The shunt base material shall be molded or laminated plastic or equivalent.
- 3.9 <u>Marking</u>. Shunts supplied to this CID sheet shall be marked with the manufacturer's standard commercial PIN, mV rating, and current rating as specified in figure 1 and table 1.
- 4. QUALITY ASSURANCE PROVISIONS. Quality assurance provisions shall be as specified in A-A-55524.
- 5. PACKAGING. Packaging shall be as specified in A-A-55524.
- 5.1 <u>Preservation, packing, and marking</u>. Preservation, packing, and marking shall be as specified in the contract or order.
- 6. NOTES.
- 6.1 <u>PIN</u>. The PIN should be used for Government purposes to buy commercial products to this CID. See section 2 for PIN format example.
- 6.2 <u>Commercial and Government Entity (CAGE) code</u>. For ordering purposes, inventory control, and submission of these shunts to DSCC under the Military Parts Control Advisory Group (MPCAG) evaluation program, CAGE code 58536 should be used.
- 6.3 Source of documents.

Commercial Item Description

A-A-55524 - Shunts, Instrument (External, 50 Millivolt, Lightweight Type).

(Copies of CID's are available from the Defense Automated Printing Service, Bldg 4D (DPM-DODSSP), 700 Robbins Avenue, Philadelphia, PA 19111-5094.)

- 6.4 Ordering data. Ordering data shall be as specified in A-A-55524.
- 6.5 <u>Commercial products</u>. As part of the market analysis and research effort, this CID was coordinated with the following manufacturers of commercial products. At the time of CID preparation and coordination, these manufacturers were known to have commercial products that would meet the requirements of this CID. (NOTE: This information should not be considered as a list of approved manufacturers or be used to restrict procurement to only the manufacturers shown.)

Manufacturer's CAGE 03030	Manufacturer's name and address Empro Manufacturing Co., Inc. PO. Box 26060 10920 East 59 th Street Indianapolis, IN 46226 Phone Number: 317-823-4478
59131	Electronic Precision Components 519 South 5 th Avenue Mount Vernon, NY 10550-4430 Phone Number: 914-664-2333
53498	Crompton Instruments, Inc. 1640 Airport Road Kennesaw, GA 30144 Phone Number: 770-425-8903
91812	Janco Corp. 3111 Winona Avenue Burbank, CA 91504-2543 Phone Number: 818-846-1800
99246	Ram Meter, Inc. 1903 Barrett Drive Troy, MI 48084-5396 Phone Number 248-362-0990

6.6 <u>Part number (P/N) supersession data</u>. This CID supersedes the following manufacturer's P/N's as shown. This information is being provided to assist in reducing proliferation in the government inventory system.

Dash Number (see table 1) AA55524/1-	Manufacturer CAGE	Manufacturer P/N <u>1</u> /	Manufacturer CAGE	Manufacturer P/N <u>1</u> /
001	03030	MLA-10-50	53498	871-92UU-MTEC
002	03030	MLA-15-50	53498	871-92UU-NDEC
003	03030	MLA-20-50	53498	871-92UU-NGEC
004	03030	MLA-30-50	53498	871-92UU-NLEC
005	03030	MLA-50-50	53498	871-92UU-NTEC
006	03030	MLA-75-50	53498	871-92UU-PBEC
007	03030	MLA-80-50	53498	871-92UU-PDEC
800	03030	MLA-85-50	53498	871-92UU-PFEC
009	03030	MLA-100-50	53498	871-92UU-PKEC
010	03030	MLA-150-50	53498	871-92UU-PZEC
001	59131	10-50	91812	8300-10
002	59131	15-50	91812	8300-15
003	59131	20-50	91812	8300-20
004	59131	30-50	91812	8300-30
005	59131	50-50	91812	8300-50
006	59131	75-50	91812	8300-75
007	59131	80-50	91812	8300-80
800	59131	85-50	91812	8300-85
009	59131	100-50	91812	8300-100
010	59131	150-50	91812	8300-150
001	99246	MSA100-10A50		
002	99246	MSA150-15A50		
003	99246	MSA200-20A50		
004	99246	MSA300-30A50		
005	99246	MSA500-50A50		
006	99246	MSA750-75A50		
007	99246	MSA800-80A50		
800	99246	MSA850-85A50		
009	99246	MSA101-100A50		
010	99246	MSA151-150A50		

^{1/} The manufacturer's P/N shall not be used for procurement to the requirements of this CID. At the time of preparation of this CID, the aforementioned commercial products were reviewed and could be replaced by the CID PIN shown.

^{6.7 &}lt;u>Government users</u>. To acquire information on obtaining these shunts from the Government inventory system, contact Defense Supply Center, Columbus, ATTN: DSCC-CE, PO Box 3990, Columbus, OH 43216-5000, or telephone (614) 692-7790.

- 6.8 <u>Standard requirements for testing</u>. Recommended testing requirements can be found in Institute of Electrical and Electronics Engineers (IEEE) Standard 316.
- 6.9 <u>Style and type designation cross-reference</u>. Table 1 is for cross-reference only. Ordering is identified to the CID.

TABLE 1. Style and type designation cross-reference.

CID AA55524/1	Current rating (Amperes)	MS91586	MIL-S-61 Type & style	AN3200
-001	10	-8	MSA100	***
-002	15	-9	MSA150	***
-003	20	-10	MSA200	***
-004	30	-1	MSA300	***
-005	50	-2	MSA500	-50
-006	75	-3	MSA750	***
-007	80	-4	MSA800	***
-008	85	-5	MSA850	-85
-009	100	-6	MSA101	***
-010	150	-7	MSA151	-150

6.9.1 <u>National Stock Numbers (NSN's)</u>. The following is a list of NSN's assigned which correspond to this CID. The list is for information only and may not be indicative of all possible NSN's associated with the CID. For up to date information on assigned NSN's, please contact the Defense Supply Center, Columbus, ATTN: DSCC-CE, PO Box 3990, Columbus, OH 43216-5000, or telephone (614) 692-7790.

Dash number (see table I) AA55524/1-	Current Rating (Amperes)	NSN
001	10	6625-00-542-0606
002	15	6625-00-060-1213
003	20	6625-00-892-4342
004	30	6625-00-684-8095
005	50	6625-00-539-9638
006	75	6625-00-834-8954
007	80	6625-00-197-2365
008	85	XXXX-XX-XXXX
009	100	6625-00-539-9637
010	150	6625-00-166-1002

MILITARY INTERESTS:

CIVIL AGENCY COORDINATING ACTIVITY:

Custodians:

Army - CR

Navy - EC

Air Force - 82

Preparing Activity: DLA - CC

GSA-7FXE

Review activities:

Army - AR, MI

Air Force - 99

(Project 6625-0911)